

Viral Filtration Efficiency (VFE) Final Report

Test Article: n-1, n-2, n-3
 Laboratory Number: 701057
 Study Received Date: 10 Jul 2013
 Test Procedure(s): Standard Test Protocol (STP) Number: STP0007 Rev 07

Summary: The VFE test is performed to determine the filtration efficiency by comparing the viral control counts to test article effluent counts. A suspension of bacteriophage Φ X174 was aerosolized using a nebulizer and delivered to the test article at a constant flow rate. The aerosol droplets were drawn through a six-stage, viable particle, Andersen sampler for collection. This method allows a reproducible challenge to be delivered to the test articles. The VFE test procedure was adapted from ASTM F2101. All test method acceptance criteria were met.

Test Side: Outside Surface
 Area Tested: ~45.6 cm²
 VFE Flow Rate: 28.3 Liters per minute (L/min)

Results:

Test Article	Percent VFE (%)
n-1	99.8
n-2	99.6
n-3	99.8

Note: Plate count totals for each stage are available upon request.

Mean Positive Control Count: 1,810 plaque forming units (PFU)
 Negative Control Count: <1 PFU
 Mean Particle Size (MPS): 3.0 μ m



Study Director

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 Study Completion Date